

510(k) Summary For Analogic Corporation AN5150 and AN7150 Digital Radiology Systems

DATE THIS SUMMARY WAS PREPARED:

October 14, 2003

SUBMITTER'S NAME AND ADDRESS:

Analogic Corporation 8 Centennial Drive Peabody, MA 01960

CONTACT PERSON:

Marvin Rosenbaum, Regulatory Affairs Manager Telephone (978) 977-3000 extension 3049

Facsimile (978) 977-6808

DEVICE NAME:

Proprietary or Trade Name: AN5150 and AN7150 Digital Radiology Systems

Common Name: Digital Radiology Systems

Classification Name: Digital Radiology Systems and Accessories

PREDICATE DEVICE:

The legally marketed devices to which equivalence is being claimed is:

The Analogic DR 5000 and DR 9000 Digital Radiology Systems that was cleared under Premarket Notification K001341 & K001336 respectively and the Sterling Diagnostic DirectRay Operator Console cleared under Premarket Notofication K980970.

DEVICE DESCRIPTION: INTENDED USE

The AN5150 is a digital X-ray chest system intended for use by qualified/trained doctor or technician and is designed to perform radiographic chest examinations.

The AN7150 is a digital X-ray general radiography system intended for use by qualified/trained doctor or technician and is designed to perform radiographic exposures of the whole body including skull, spinal column, chest, abdomen, extremities and other body parts excluding mammography. Radiographic exposures may be taken with the patient in the sitting, standing, or lying in the prone or supine position.

Images from the AN5150 or AN7150 become available for preview by the doctor /x-ray technician on the operator's workstation seconds after the x-ray exposure. After acceptance digital (DICOM) images can be stored on electronic media, or exported to a (DICOM/PACS) network, clinical review station or to a film printer.

COMPARISION OF TECHNOLIGICAL CHARACTERISTICS:

The design of the AN5150 and AN7150 Digital Radiology Systems is derived from the design of the Digital Radiology Systems The DR 5000 and DR 9000.

NONCLINICAL TEST USED IN DETERMINATION OF SUBSTANIAL EQUIVALENCE:

The design of the AN5150 and AN7150 Digital Radiology Systems has been thoroughly validated at the unit and system level and meets all element of its Requirements Specification. This included the following non-clinical tests:

- IEC 60601-1, an FDA recognized consensus standard for safety of medical electrical equipment.
- Electromagnetic Emissions Tests to determine if it was in compliance with the EN 55011, Group 1, and Class B emissions limits.
- IEC 60601-1-2, an FDA recognized consensus standard for electromagnetic compatibility.
- Line Dropout and Variation Susceptibility were tested according to the FDA Reviewer Guidance for PreMarket Notification Submissions, November 1993 Mechanical Shock and Vibration Tests
- Shipping Container Transportation Test

All tests passed the stated criteria.

CONCLUSIONS FROM NONCLINCAL TESTING

The testing of the AN5150 and AN7150 Digital Radiology Systems demonstrates that the performance is substantially equivalent to the predicate devices cited above.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

NOV 1 9 2003

Mr. Marvin Rosenbaum Regulatory Affairs Manager Analogic Corporation 8 Centennial Drive PEABODY MA 01960

Re: K033345

Trade/Device Name: AN5150 and AN7150 Digital Radiology Systems

Regulation Number: 21 CFR§ 892.1680 Regulation Name: Stationary X-ray System

Regulatory Class: II Product Code: 90 KPR Dated: October 10, 2003 Received: October 20, 2003

Dear Mr. Rosenbaum:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of the letter:

8xx.1xxx	(301) 594-4591
876.2xxx, 3xxx, 4xxx, 5xxx	(301) 594-4616
884.2xxx, 3xxx, 4xxx, 5xxx, 6xxx	(301) 594-4616
892.2xxx, 3xxx, 4xxx, 5xxx	(301) 594-4654
Other	(301) 594-4692

Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97) you may obtain. Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html.

Sincerely yours,

Mancy C brogdon
Nancy C. Brogdon

Director, Division of Reproductive, Abdominal and Radiological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

510(k) Number <u>K033345</u>:

Device Name: AN5150 and AN7150 Digital Radiology Systems

Indications For Use:

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(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NECESSARY)

Concurrence of CDRH, Office of Device Evaluation (ODE)		
Prescription Use	OR	Over-The-Counter Use
(Per 21 CFR 801.109)		